



PATENT
ATTORNEY DOCKET NO.: NPI-30(14845)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
Reed, et al.)	Examiner: Hai Vo
)	
Serial No.: 09/976,411)	Art Unit: 1771
)	
Filed: October 12, 2001)	Account No.: 04-1403
)	
Title: Medical Packaging Substrate)	Confirm. No.: 1102

Board of Patent Appeals and Interferences
United States Patent and Trademark Office
PO Box 1450
Arlington, Virginia 22313-1450

BRIEF ON APPEAL

Dear Sir:

In response to the communication dated February 24, 2005 for the above-captioned patent application, Appellant submits the following Brief on Appeal in accordance with 37 C.F.R. § 41.37.

1. Real Party in Interest

The real party in interest with respect to the above-captioned application and with respect to this appeal is Neenah Paper, Inc.

2. Related Appeals and Interferences

Appellant is not aware of any other prior or pending appeals, interferences or judicial proceedings that may be related to, directly affect or be directly affected by or having a bearing on the Board's decision in this appeal.

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3. Status of Claims

Claims 21-41, all of which are attached hereto in the Claims Appendix, are currently pending in the present application, including independent claims 21, 36, 37, and 39. Previously, claims 1-20 were cancelled. Claims 21-41 (all the pending claims) are being appealed.

4. Status of Amendments

All amendments in this case have been entered.

5. Summary of Claimed Subject Matter

Independent claim 1 is directed to a medical packaging substrate comprising a polymer-impregnated paper-based web. The polymer-impregnated paper-based web is saturated with a saturant comprising a polymer emulsion having a glass transition temperature of -20°C or less. (See e.g., Appl. p. 7, ll. 19-25). The saturant is present at an add-on level of from about 20 to about 80 dry parts per 100 dry parts of fiber in the polymer-impregnated paper-based web. (See e.g., Appl. p. 17, ll. 26-31 and p. 18, ll. 1-12). The polymer-impregnated paper-based web exhibits a percent bacterial filtration efficiency of at least about 95%. (See e.g., Appl. pp. 20-28).

Independent claim 36 is directed to a medical packaging substrate comprising a polymer-impregnated paper-based web. The polymer-impregnated paper-based web is saturated with a saturant comprising a polymer emulsion having a glass transition temperature of -20°C or less. (See e.g., Appl. p. 7, ll. 19-25). The saturant is present at an add-on level of from about 20 to about 70 dry parts per 100 dry parts of fiber in the polymer-impregnated paper-based web. (See e.g., Appl. p. 17, ll. 26-31 and p. 18, ll. 1-12). The polymer-impregnated paper-based web exhibits a percent bacterial filtration

efficiency of at least about 95%. The polymer-impregnated paper-based web also a Gurley Hill porosity of greater than about 15 sec/100 cc. (See e.g., Appl. pp. 20-28).

Independent claim 37 is directed to a medical packaging substrate comprising a polymer-impregnated paper-based web. The polymer-impregnated paper-based web is saturated with a saturant comprising a polymer emulsion having a glass transition temperature of -20°C or less. (See e.g., Appl. p. 7, ll. 19-25). The saturant is present at an add-on level of from about 20 to about 70 dry parts per 100 dry parts of fiber in the polymer-impregnated paper-based web. (See e.g., Appl. p. 17, ll. 26-31 and p. 18, ll. 1-12). The polymer-impregnated paper-based web exhibits a percent bacterial filtration efficiency of at least about 98%. The polymer-impregnated paper-based web also a Gurley Hill porosity of greater than about 15 sec/100 cc. (See e.g., Appl. pp. 20-28).

Independent claim 39 is directed to a medical packaging substrate comprising a polymer-impregnated paper-based web. The polymer-impregnated paper-based web is saturated with a saturant comprising at least two polymer emulsions, at least one of which has a glass transition temperature of -20°C or less. (See e.g., Appl. p. 7, ll. 19-25 and Appl. pp. 15-16). The saturant is present at an add-on level of from about 20 to about 70 dry parts per 100 dry parts of fiber in the polymer-impregnated paper-based web. (See e.g., Appl. p. 17, ll. 26-31 and p. 18, ll. 1-12). The polymer-impregnated paper-based web exhibits a percent bacterial filtration efficiency of at least about 98%. The polymer-impregnated paper-based web also a Gurley Hill porosity of greater than about 15 sec/100 cc. (See e.g., Appl. pp. 20-28).

6. Grounds of Rejection to be Reviewed on Appeal

Claims 21-31 and 36-40 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,156,677 to Brown Reed, et al. In addition, claims 21-41 stand rejected under 35 U.S.C. § 102(b) and/or §103(a) in view of U.S. Patent Nos. 4,692,374 to Bouchette or 5,191,734 to Weber, et al.¹

7. Argument

I. Claims 21-31 and 36-40 Are Not Anticipated Under 35 U.S.C. § 102(e) in View of U.S. Patent No. 6,156,677 to Brown Reed, et al.

A claim is anticipated only if each and every element as set forth in the claim is found in a single prior art reference. See *Verdegaal Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628 (Fed. Cir. 1987). Although anticipation under Section 102 is not an *ipsissimis verbis* test (e.g., identity of terminology is not required), the elements must be arranged as required by the claim, and the identical invention must be shown in as complete detail as is contained in the claim. *In re Bond*, 910 F.2d 831 (Fed. Cir. 1990); *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226 (Fed. Cir. 1989).

Brown Reed, et al. relates to a medical packaging substrate material that may be sterilized by an oxidizing gas plasma. The material may include a cellulosic nonwoven web applied with a saturant at a level of from about 50 to about 150 wt.% based on the dry weight of the fibers. The saturant may include, for instance, poly(vinylidene chloride)-acrylonitrile-butyl acrylate copolymer, a mixture of such a polymer with a carnauba wax emulsion, or a mixture of a poly(vinylidene chloride)

¹ Claims 21-41 were previously rejected under the judicially created doctrine of obviousness-type double patenting in view of claims 1-5 U.S. Patent No. 6,743,522. However, without commenting on the propriety of this rejection, Appellant is submitting herewith a Terminal Disclaimer to obviate this rejection.

acrylate copolymer and a carnauba wax emulsion. (Col. 2, ll. 33-51). However, Brown Reed, et al. fails to disclose certain limitations of claims 21-31 and 36-40.

A. Brown Reed, et al. Does Not Disclose a Polymer Emulsion Having a Glass Transition Temperature of -20°C or Less

Brown Reed, et al. does not expressly disclose a polymer emulsion having a *glass transition temperature of -20 °C or less* as required by claims 21-31 and 36-40. Nevertheless, the Examiner relies on a theory of “inherency” in an attempt to anticipate these claims. To establish inherency, the evidence must make clear that the missing descriptive matter is *necessarily present* in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. The mere fact that a certain thing *may* occur or be present in the reference is not sufficient. *In re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted); *In re Rijckaert*, 9 F.3d 1531, 1534, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993). Simply stated, inherency may not be established by probabilities or possibilities.

In the present case, the Examiner asserts that “since Brown Reed teaches the same polymer emulsion as Applicants . . . the glass transition temperature would be inherently present.” (Office Action of 09/16/04, p. 5). The mere listing of several polymers, however, in no way dictates that the claimed glass transition temperature is necessarily present. Examples 1 and 3-4 of Brown Reed, et al., for instance, describe a cellulosic nonwoven web impregnated with Daran® SL143, which is said to be a poly(vinylidene chloride)-acrylonitrile-butyl acrylate copolymer obtained from Hampshire Chemical Corporation of Hampshire, Mass. (Col. 7, ll. 20-26). Although the glass transition temperature (“T_g”) of Daran® SL143 is not expressly recited in Brown Reed, et al., U.S. Patent No. 6,916,130 to Holt, et al. (included in an IDS filed herewith)

indicates that Daran® SL143 has a T_g of 15°C, which is well outside the claimed range of -20°C or less. Similarly, Example 6 employs Hycar® 26322, which is said to be an acrylic binder available from B.F. Goodrich Co. of Cleveland, Ohio. However, U.S. Patent No. 5,191,734 to Weber, et al. (cited by the Examiner) specifically indicates that Hycar® 26322 has a T_g of -15°C. (Col, 7, ll. 49-53).

Thus, it is evident that the claimed glass transition temperature does not necessarily flow from the teachings of Brown Reed, et al. For at least this reason, Appellant submits that claims 21-31 and 36-40 are not anticipated by Brown Reed, et al.

B. Brown Reed, et al. Does Not Disclose a Bacterial Filtration Efficiency of At Least About 95%

The Examiner acknowledges that Brown Reed, et al. does not expressly disclose the claimed bacterial filtration efficiency, but nevertheless asserts that the value is “inherent.” The basis for the inherency rejection is that the product and process of claims 21-31 and 36-40 and Brown Reed, et al. are the same. As noted above, however, the claimed glass transition temperature of -20°C or less is not disclosed in Brown Reed, et al. The Examiner conceded that “the basis for inherency could *not* be established” if Brown Reed, et al. failed to disclose the claimed glass transition temperature. (Office Action of 02/24/05, pp. 3-4) (Emphasis added). Thus, for at least the reason that Brown Reed, et al. does *not* disclose the claimed glass transition temperature, Appellant submits that the rejection based on Brown Reed, et al. is improper.

In any event, Appellant previously submitted the Affidavit of Ms. Karen H. Bean under 37 C.F.R. § 1.132, which established that the %BFE of a product made according to Brown Reed, et al. was outside the claimed %BFE range. In the recent Office Action,

however, the Examiner stated that the Affidavit was not “persuasive to overcome the rejections because [it is] not commensurate in scope with the claims.” (Office Action of 02/24/05, p. 4). However, this objection is misplaced in that the Affidavit does not relate to the testing of the claimed saturant. Instead, the Affidavit shows that a sample made according to Brown Reed, et al. only had a %BFE of 92.45% – well below the claimed lower limit of 95%.

The Examiner also indicated that the Affidavit was “completely silent as to why the product of Brown Reed fails to meet the %BFE as presently claimed.” (Office Action of 02/24/05, p. 4). Appellant notes, however, that various aspects of the claimed medical packaging substrate may be altered to influence its %BFE, e.g., the type of saturant polymers utilized, the add-on level, the type of web, and so forth. For instance, the present specification repeatedly emphasizes that the use of polymer latexes having a glass temperature of -20°C or less have been found to improve the %BFE. (See e.g., Appl. p. 8, ll. 1-6). Thus, for at least the reasons set forth above, Appellant submits that Brown Reed, et al. does not disclose the claimed %BFE.

II. Claims 21-41 Are Not Anticipated by U.S. Patent No. 4,692,374 to Bouchette under 35 U.S.C. §102(b)

Bouchette is directed to an antimicrobially active, nonwoven web and a wet wiper that contains the web. The web of Bouchette is (1) applied throughout with an uncured binder, (2) applied throughout with an antimicrobial agent, preferably an organo-silicon quaternary ammonium salt, and (3) cured so that the binder material binds the fibers together. However, Bouchette fails to disclose or suggest certain limitations of claims 21-41.

A. Bouchette Does Not Disclose a “Medical Packaging Substrate”

Claims 21-41 are directed to a “medical packaging substrate”, i.e., a material used in forming packages for the medical field, such as for packaging medical instruments and other devices that require sterilization. The claimed medical packaging substrates are specifically designed to allow for surgical instruments contained therein to become sterilized, while simultaneously acting as a good barrier to bacteria. Bouchette completely fails to disclose or suggest such a medical packaging substrate. Instead, as noted above, Bouchette describes materials for use as antimicrobial wet wipers.

B. Bouchette Does Not Disclose a Polymer Emulsion Having a Glass Transition Temperature of -20°C or Less

Bouchette does not expressly disclose a polymer emulsion having a *glass transition temperature of -20 °C or less* as required by claims 21-41. Nevertheless, the Examiner relies on a theory of “inherency” in an attempt to anticipate these claims. Specifically, the Examiner indicates that Bouchette discloses the use of acrylate emulsions, butadiene-styrene emulsions and acrylonitrile-butadiene emulsions, which are “exactly the same binders being employed by Applicants.” (Office Action of 02/24/05, p. 6). Even if this were generally true, Appellant notes that the mere mention of a similar type of polymer does not necessarily dictate that the glass transition temperature is -20°C or less. For example, the present specification discloses the use of acrylic polymers having glass transition temperatures within the claimed range (e.g., Hystretch® V-29, $T_g = -29^\circ\text{C}$) and outside the claimed range (e.g., Hycar® 26084, $T_g = 8^\circ\text{C}$). Moreover, it is Appellant’s understanding that the commercially available polymers referenced in Bouchette, i.e., Airflex A-410, Airflex A-106, and HA-8, have

glass transition temperatures of 4°C, 0°C, and -10°C, respectively. Thus, the claimed glass transition temperature is not *necessarily present* in Bouchette, which is required to establish “inherency” under 35 U.S.C. § 102.

C. Bouchette Does Not Disclose a Bacterial Filtration Efficiency of At Least About 95%

The Examiner acknowledges that Bouchette does not expressly disclose the claimed bacterial filtration efficiency, but nevertheless asserts that the value is “inherent.” The basis for the inherency rejection is that the product and process of claims 21-41 and Bouchette are the same. As noted above, however, the claimed glass transition temperature of -20°C or less is not disclosed in Bouchette. The Examiner conceded that “the basis for inherency could *not* be established” if a reference failed to disclose the claimed glass transition temperature. (Office Action of 02/24/05, pp. 3-4) (Emphasis added). Thus, for at least the reason that Bouchette does *not* disclose the claimed glass transition temperature, Appellant submits that the rejection based on Bouchette is improper.

III. Claims 21-41 Are Not Anticipated by U.S. Patent No. 5,191,734 to Weber, et al. under 35 U.S.C. §102(b)

Weber, et al. is directed to a material for use in agricultural mulch and row covers, bags, outer covers for personal care products (e.g., diapers, feminine pads, training pants, incontinence products, and wound dressings), surgical drapes, and gowns. However, Weber, et al. fails to disclose or suggest certain limitations of claims 21-41.

A. Weber, et al. Does Not Disclose a “Medical Packaging Substrate”

Claims 21-41 are directed to a “medical packaging substrate”, i.e., a material used in forming packages for the medical field, such as for packaging medical instruments and other devices that require sterilization. The claimed medical packaging substrates are specifically designed to allow for surgical instruments contained therein to become sterilized, while simultaneously acting as a good barrier to bacteria. Weber, et al. completely fails to disclose or suggest such a medical packaging substrate.

B. Weber, et al. Does Not Disclose a Bacterial Filtration Efficiency of At Least About 95%

The Examiner acknowledges that Weber, et al. does not expressly disclose the claimed bacterial filtration efficiency, but nevertheless asserts that the value is “inherent.” The basis for the inherency rejection is that the product and process of claims 21-41 and Weber, et al. are the same. As noted above, however, inherency can only be established when the evidence makes clear that the missing descriptive matter is necessarily present in the reference, and that it would be so recognized by persons of ordinary skill in the art. An inherency rejection may not be based on what would result due to the optimization of conditions, but only on what was necessarily present in the prior art. In the instant case, numerous aspects of the medical packaging substrate may be altered to influence its properties, e.g., the type of saturant polymers utilized, the add-on level, the type of web, and so forth. Thus, to obtain the claimed properties, one of ordinary skill would have to select from numerous possible conditions and parameters. Consequently, Appellant respectfully submits that the claimed properties do not necessarily flow from the teachings of Weber, et al.

IV. Claims 21-41 Are Not Obvious under 35 U.S.C. §103(a) in view of U.S. Patent Nos. 4,692,374 to Bouchette or 5,191,734 to Weber, et al.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references, when combined, must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992).

A. No Suggestion or Motivation Exists to Modify Bouchette or Weber, al. to Achieve the Claimed Limitations

An applicant's claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill would have been prompted to modify the teachings of the references to arrive at the claimed invention. See *In re Regel*, 188 U.S.P.Q. 132 (C.C.P.A. 1975). The mere fact that the prior art *may* be combined or modified in the manner suggested by the Examiner does not make the combination or modification obvious unless the prior art suggested the desirability of the combination or modification. *In re Fritch*, 12 U.S.P.Q.2d 1780, 1783-84 (Fed. Cir. 1992); *In re Mills*, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). Thus, where no reasonable intrinsic or extrinsic justification exists in the prior art for the proposed combination or modification, a case of *prima facie* obviousness will not have been established.

In the present case, there is no *explicit* or *implicit* motivation set forth in Bouchette or Weber, et al. for the modification of either reference to achieve the claimed limitations. The Examiner does not even attempt to identify any such motivation, but only states that each reference “strongly suggests the claimed subject matter.” (Office Action of 09/16/04, pp. 8-9). Nothing in either Bouchette or Weber, et al. suggests the desirability of the present claims.

Appellant emphasizes that the teachings of the references must be viewed *in their entirety* to sustain a *prima facie* case of obviousness under 35 U.S.C. § 103. Further, the appropriate test under 35 U.S.C. § 103 is not whether the differences between the prior art and the claims are obvious, but instead whether the *claimed invention as a whole* would have been obvious. In this case, Appellant respectfully submits that when Bouchette and Weber, et al. are properly viewed in their entirety, there is simply no motivation or suggestion—explicit or implicit—to modify the references to achieve the limitations of the present claims.

B. Bouchette and Weber, et al. Are Nonanalogous Art

Bouchette and Weber, et al. are not even “analogous art” with respect to Appellant’s claimed invention for purposes of an obviousness rejection under Section 103. To rely on a reference as a basis for rejection, the reference must be either: (1) in the field of applicant’s endeavor or, if not, then (2) reasonably pertinent to the particular problem with which the applicant was concerned. *In re Oetiker*, 977 F.2d 1443, 1447 (Fed. Cir. 1992); M.P.E.P. § 2141.01(a). In this case, neither Bouchette nor Weber, et al. is in the same “field of endeavor” as Appellant’s present invention. Namely, Bouchette is in the field of wet wipers and Weber, et al. is in the field of agricultural

mulch and row covers, bags, outer covers for personal care products, surgical drapes, or gowns. On the other hand, the claims of Appellant's present application are in the field of medical packaging substrates.

Furthermore, Bouchette and Weber, et al. are not reasonably pertinent to the particular problems faced by the present inventors, i.e., providing a medical packaging substrate that allows the entrance of sterilization materials, is sufficiently strong, and also exhibits good bacteria efficacy. For a reference to be reasonably pertinent to the particular problem with which Appellant is concerned, the Examiner must show that a person of ordinary skill, seeking to solve the problem of creating an improved medical packaging substrate, would reasonably be expected or motivated to look to the materials of Bouchette or Weber, et al. (e.g., wet wipe). See *Oetiker*, 977 F.2d at 1447. The Examiner has simply not shown this to be the case. The Federal Circuit has clearly stated that the "combination of elements from nonanalogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a *prima facie* case of obviousness." *Oetiker*, 977 F.2d at 1447.

C. The Only Incentive or Motivation for a Modification of Bouchette or Weber, et al. Stems Improperly from the Teachings of the Present Invention

It is improper to use a patent applicant's own specification to provide the only suggestion for modifying the prior art. The Federal Circuit has repeatedly warned against using the applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings in the prior art. See *Grain Processing Corp. v. American Maize-Products*, 5 U.S.P.Q.2d 1788 (Fed. Cir. 1988). Thus, the mere fact that the prior art *may* be modified in the manner suggested by the Examiner does not

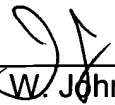
make the combination or modification obvious unless the prior art suggested the desirability of the combination or modification. *In re Fritch*, 12 U.S.P.Q.2d 1780 (Fed. Cir. 1992). In the present case, any incentive or motivation for modifying Bouchette or Weber, et al. results *improperly* from using Appellant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings in the prior art. Accordingly, it is respectfully submitted that any modification of the Bouchette or Weber, et al. impermissibly relies on the use of hindsight, and hindsight cannot be successfully used to support a *prima facie* case of obviousness. Thus, a *prima facie* case of obviousness has not been established.

8. Conclusion

Claims 21-31 and 36-40 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,156,677 to Brown Reed, et al. However, Brown Reed, et al. fails to teach each and every element of these claims. Further, claims 21-41 stand rejected under 35 U.S.C. § 102(b) and/or §103(a) in view of U.S. Patent Nos. 4,692,374 to Bouchette or 5,191,734 to Weber, et al. However, neither Bouchette nor Weber, et al. discloses or suggests each and every element of these claims. As such, Appellant is entitled to the issuance of a patent.

Respectfully submitted,

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Date: 10/11/05

CLAIMS APPENDIX

Claims Involved in the Appeal:

21. A medical packaging substrate comprising a polymer-impregnated paper-based web, said polymer-impregnated paper-based web being saturated with a saturant comprising a polymer emulsion having a glass transition temperature of -20°C or less, said saturant being present at an add-on level of from about 20 to about 80 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web, wherein said polymer-impregnated paper-based web exhibits a percent bacterial filtration efficiency of at least about 95%.

22. The medical packaging substrate of claim 21, wherein said polymer emulsion has a glass transition temperature of about -29°C or less.

23. The medical packaging substrate of claim 21, wherein said polymer emulsion has a glass transition temperature of about -43°C or less.

24. The medical packaging substrate of claim 21, wherein said polymer emulsion has a glass transition temperature of about -60°C or less.

25. The medical packaging substrate of claim 21, wherein said saturant is present at an add-on level of from about 20 to about 70 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web.

26. The medical packaging substrate of claim 21, wherein said saturant is present at an add-on level of from about 20 to about 60 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web.

27. The medical packaging substrate of claim 21, wherein said saturant is present at an add-on level of from about 30 to about 50 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web.

28. The medical packaging substrate of claim 21, wherein said polymer emulsion comprises from about 60 to about 100 percent, on a dry weight basis, of said saturant.

29. The medical packaging substrate of claim 21, wherein said polymer emulsion comprises a polyacrylate.

30. The medical packaging substrate of claim 21, wherein said polymer emulsion comprises a blend of a polyacrylate and a polymer that is not a polyacrylate.

31. The medical packaging substrate of claim 21, wherein said saturant comprises an additional polymer emulsion.

32. The medical packaging substrate of claim 31, wherein said additional polymer emulsion has a glass transition temperature of -20°C or less.

33. The medical packaging substrate of claim 31, wherein said additional polymer emulsion has a glass transition temperature of about -29°C or less.

34. The medical packaging substrate of claim 31, wherein said additional polymer emulsion has a glass transition temperature of about -43°C or less.

35. The medical packaging substrate of claim 31, wherein said additional polymer emulsion has a glass transition temperature of about -60°C or less.

36. A medical packaging substrate comprising a polymer-impregnated paper-based web, said polymer-impregnated paper-based web having a Gurley Hill porosity of greater than about 15 sec/100 cc, said polymer-impregnated paper-based web being

saturated with a saturant comprising a polymer emulsion having a glass transition temperature of -20°C or less, said saturant being present at an add-on level of from about 20 to about 70 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web, and wherein said polymer-impregnated paper-based web exhibits a percent bacterial filtration efficiency of at least about 95%.

37. A medical packaging substrate comprising a polymer-impregnated paper-based web, said polymer-impregnated paper-based web having a Gurley Hill porosity of greater than about 15 sec/100 cc, said polymer-impregnated paper-based web being saturated with a saturant comprising a polymer emulsion having a glass transition temperature of -20°C or less, said saturant being present at an add-on level of from about 20 to about 70 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web, and wherein said polymer-impregnated paper-based web exhibits a percent bacterial filtration efficiency of at least about 98%.

38. A medical packaging substrate according to claim 37, wherein said polymer-impregnated paper-based web exhibits a percent bacterial filtration efficiency of at least about 99%.

39. A medical packaging substrate comprising a polymer-impregnated paper-based web, said polymer-impregnated paper-based web having a Gurley Hill porosity of greater than about 15 sec/100 cc, said polymer-impregnated paper-based web being saturated with a saturant comprising at least two polymer emulsions, wherein at least one of said polymer emulsions has a glass transition temperature of -20°C or less, said saturant being present at an add-on level of from about 20 to about 70 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web, and wherein said

polymer-impregnated paper-based web exhibits a percent bacterial filtration efficiency of at least about 98%.

40. The medical packaging substrate of claim 39, wherein one of said at least two polymer emulsions has a glass transition temperature of about -43°C or less.

41. The medical packaging substrate of claim 40, wherein both of said at least two polymer emulsions have a glass transition temperature of about -43°C or less.

EVIDENCE APPENDIX

- A. Affidavit Under 37 C.F.R. § 1.132, executed by Karen H. Bean on June 30, 2003.
- The Bean Affidavit was considered by the Examiner in the Office Action of March 10, 2004.

RELATED PROCEEDINGS APPENDIX

None.



ATTORNEY DOCKET NO.: 03768/09633
14845



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Reed, <i>et al.</i>)	Group Art Unit: 1771
)	
Serial No.: 09/976,411)	Examiner: Hai Vo
)	
Filed: October 12, 2001)	Deposit Account: 50-2548
)	
For: Medical Packaging Substrate)	

AFFIDAVIT UNDER 37 CFR § 1.132

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

STATE OF GEORGIA)	
)	S.S.
COUNTY OF FULTON)	

KAREN H. BEAN, being first duly sworn, does hereby state:

That she received a Bachelor of Science Degree in Chemical Engineering from Auburn University in 1998;

That she has been a Scientist in the Research and Development Division of Kimberly-Clark Corporation since 1999, first in the Technical Paper research group responsible for medical packaging paper development, and presently in the Absorbent Core Development research group; and that she is an inventor of the medical packaging substrate of the application Serial No. 09/976,411;

That she has located in Kimberly-Clark Corporation's laboratory records, certain data concerning the medical packaging disclosed in U.S. Patent No. 6,156,677 to Brown-Reed *et al.*;

That the aforementioned laboratory records were kept by Amy Brown-Reed in the ordinary course of her duties at Kimberly-Clark;

That the laboratory records indicate data about the material disclosed in Brown-Reed '677, including the Gurley Hill porosity for a sample of the packaging, as well as a notation that a sample was sent to Nelson Labs for percent bacteria filtration efficiency (%BFE) testing;

That Nelson Labs has verified that the same protocol used for the testing reported herein was the same protocol used for testing the %BFE of the material of the present application; and

That the sample of the medical packaging disclosed in Brown-Reed '677 had an average %BFE of 92.45%;

K H B
Karen H. Bean

SWORN TO and subscribed before me
this 30th day of June, 2003

Stephanie B. Deal (SEAL)
Notary Public for Gwinnett County
My Commission Expires: July 28, 2005.

